FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO Hays Energy, LLC

> AUTHORIZING THE OPERATION OF Hays Energy Facility Electric Services

LOCATED AT
Hays County, Texas
Latitude 29° 46′ 50″ Longitude 97° 59′ 22″
Regulated Entity Number: RN100211689

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site, emission units and affected source listed in this permit. Operations of the site, emission units and affected source listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site, emission units and affected source authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site, emission units and affected source.

| Permit No: | 02079 | Issuance Date: | September 17, 2013 | |
|------------|----------|----------------|--------------------|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| For the Co | | | | |
| FOR THE CO | mmission | | | |

Table of Contents

| Section | Page |
|---|------|
| General Terms and Conditions | 1 |
| Special Terms and Conditions: | 1 |
| Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting | |
| Additional Monitoring Requirements | |
| New Source Review Authorization Requirements | 10 |
| Compliance Requirements | |
| Protection of Stratospheric Ozone | 11 |
| Temporary Fuel Shortages (30 TAC § 112.15) | 11 |
| Permit Location | |
| Permit Shield (30 TAC § 122.148) | |
| Acid Rain Permit Requirements | 12 |
| Clean Air Interstate Rule Permit Requirements | 16 |
| Attachments | 21 |
| Applicable Requirements Summary | 22 |
| Additional Monitoring Requirements | 32 |
| Permit Shield | 45 |
| New Source Review Authorization References | |
| Appendix A | 50 |
| Acronym List | |
| Appendix B | 52 |

General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

- 1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
 - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

- D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
- E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
- F. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 101.372 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)
 - (iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)
 - (iv) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)
 - (v) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)
 - (vi) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit
- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
 - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEO
 - D. Title 30 TAC \S 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)

- I. Title 30 TAC § 101.222 (relating to Demonstrations)
- J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
- 3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
 - A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
 - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
 - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
 - (3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

- B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
 - (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC \S 111.111(a)(7)(A), complying with 30 TAC \S 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x , the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC \S 122.146:
 - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3)Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
 - (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)

- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)
 - (iii) For a source subject to 30 TAC \S 111.111(a)(8)(A), complying with 30 TAC \S 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC \S 122.146:
 - (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the

plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

- (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h/H]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- G. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:

- (i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)
- (ii) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
- (iii) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
- (iv) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)
- 4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
 - F. Title 40 CFR § 60.14 (relating to Modification)
 - G. Title 40 CFR § 60.15 (relating to Reconstruction)
 - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 5. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
- 6. For each gasoline dispensing facility, with a throughput of less than 10,000 gallons per month as specified in 40 CFR Part 63, Subpart CCCCCC, the permit holder shall comply with the following requirements:
 - A. Title 40 CFR § 63.11111(e), for records of monthly throughput
 - B. Title 40 CFR § 63.11111(i), for compliance due to increase of throughput
 - C. Title 40 CFR § 63.11113(c), for compliance due to increase of throughput
 - D. Title 40 CFR § 63.11115(a), for operation of the source
 - E. Title 40 CFR § 63.11116(a) and (a)(1) (4), for work practices
 - F. Title 40 CFR § 63.11116(b), for records availability
 - G. Title 40 CFR § 63.11116(d), for portable gasoline containers

7. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

Additional Monitoring Requirements

- 8. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:
 - A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
 - B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
 - C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).
 - D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.
 - E. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.
- 9. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points

must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

- 10. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
 - A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
- 11. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
- 12. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, material safety data sheets (MSDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144.
 - A. If applicable, monitoring of control device performance or general work practice standards shall be made in accordance with the TCEQ Periodic Monitoring Guidance document.
 - B. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

13. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

- 14. Use of Discrete Emission Credits to comply with the applicable requirements:
 - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
 - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
 - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
 - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

Protection of Stratospheric Ozone

- 15. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone.
 - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

Temporary Fuel Shortages (30 TAC § 112.15)

- 16. The permit holder shall comply with the following 30 TAC Chapter 112 requirements:
 - A. Title 30 TAC § 112.15 (relating to Temporary Fuel Shortage Plan Filing Requirements)
 - B. Title 30 TAC § 112.16(a), (a)(1), and (a)(2)(B) (c) (relating to Temporary Fuel Shortage Plan Operating Requirements)

- C. Title 30 TAC § 112.17 (relating to Temporary Fuel Shortage Plan Notification Procedures)
- D. Title 30 TAC § 112.18 (relating to Temporary Fuel Shortage Plan Reporting Requirements)

Permit Location

17. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

18. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Acid Rain Permit Requirements

19. For units STACK1, STACK2, STACK3 and STACK4 (identified on the Certificate of Representation as units STK1, STK2, STK3 and STK4), located at the affected source identified by ORIS/Facility code (55144), the designated representative and the owner or operator, as applicable, shall comply with the following Acid Rain Permit requirements.

A. General Requirements

- (i) Under 30 TAC § 122.12(1) and 40 CFR Part 72, the Acid Rain Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP) and have an independent public comment process which may be separate from, or combined with the FOP.
- (ii) The owner and operator shall comply with the requirements of 40 CFR Part 72 and 40 CFR Part 76. Any noncompliance with the Acid Rain Permit will be considered noncompliance with the FOP and may be subject to enforcement action.
- (iii) The owners and operators of the affected source shall operate the source and the unit in compliance with the requirements of this Acid Rain Permit and all other applicable State and federal requirements.
- (iv) The owners and operators of the affected source shall comply with the General Terms and Conditions of the FOP that incorporates this Acid Rain Permit.
- (v) The term for the Acid Rain permit shall commence with the issuance of the FOP that incorporates the Acid Rain permit and shall be run

concurrent with the remainder of the term of the FOP. Renewal of the Acid Rain permit shall coincide with the renewal of the FOP that incorporates the Acid Rain permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring Requirements

- (i) The owners and operators, and the designated representative, of the affected source and each affected unit at the source shall comply with the monitoring requirements contained 40 CFR Part 75.
- (ii) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and any other credible evidence shall be used to determine compliance by the affected source with the acid rain emissions limitations and emissions reduction requirements for SO_2 and NO_x under the ARP.
- (iii) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emission of other pollutants or other emissions characteristics at the unit under other applicable requirements of the FCAA Amendments (42 U.S.C. 7401, as amended November 15, 1990) and other terms and conditions of the operating permit for the source.

C. SO₂ emissions requirements

- (i) The owners and operators of each source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for ${\rm SO}_{_2}$.
- (ii) As of the allowance transfer deadline the owners and operators of the affected source and each affected unit at the source shall hold, in the unit's compliance subaccount, allowances in an amount not less than the total annual emissions of SO₂ for the previous calendar year.
- (iii) Each ton of SO₂ emitted in excess of the acid rain emissions limitations for SO₂ shall constitute a separate violation of the FCAA amendments.
- (iv) An affected unit shall be subject to the requirements under (i) and (ii) of the SO₂ emissions requirements as follows:
 - (1) Starting January 1, 2000, an affected unit under 40 CFR § 72.6(a)(2); or
 - (2) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR § 72.6(a)(3).
- (v) Allowances shall be held in, deducted from, or transferred into or among Allowance Tracking System accounts in accordance with the requirements of the ARP.

- (vi) An allowance shall not be deducted, for compliance with the requirements of this permit, in a calendar year before the year for which the allowance was allocated.
- (vii) An allowance allocated by the EPA Administrator or under the ARP is a limited authorization to emit SO_2 in accordance with the ARP. No provision of the ARP, Acid Rain permit application, this Acid Rain Permit, or an exemption under 40 CFR §§ 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (viii) An allowance allocated by the EPA Administrator under the ARP does not constitute a property right.

D. NO Emission Requirements

- (i) The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for NO₂ under 40 CFR Part 76.
- E. Excess emissions requirements for SO₂ and NO₃.
 - (i) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
 - (ii) If an affected source has excess emissions in any calendar year shall, as required by 40 CFR Part 77:
 - (1) Pay, without demand, the penalty required and pay, upon demand, the interest on that penalty.
 - (2) Comply with the terms of an approved offset plan.

F. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the affected source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the EPA Administrator.
 - (1) The certificate of representation for the designated representative for the source and each affected unit and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR § 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides

- for a 3-year period for recordkeeping (rather than a five-year period cited in 30 TAC § 122.144), the 3-year period shall apply.
- (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the ARP or relied upon for compliance certification.
- (4) Copies of all documents used to complete an acid rain permit application and any other submission under the ARP or to demonstrate compliance with the requirements of the ARP.
- (ii) The designated representative of an affected source and each affected unit at the source shall submit the reports required under the ARP including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

G. Liability

- (i) Any person who knowingly violates any requirement or prohibition of the ARP, a complete acid rain permit application, an acid rain permit, or a written exemption under 40 CFR §§ 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to FCAA § 113(c).
- (ii) Any person who knowingly makes a false, material statement in any record, submission, or report under the ARP shall be subject to criminal enforcement pursuant to FCAA § 113(c) and 18 U.S.C. 1001.
- (iii) No permit revision shall excuse any violation of the requirements of the ARP that occurs prior to the date that the revision takes effect.
- (iv) The affected source and each affected unit shall meet the requirements of the ARP contained in 40 CFR Parts 72 through 78.
- (v) Any provision of the ARP that applies to an affected source or the designated representative of an affected source shall also apply to the owners and operators of such source and of the affected units at the source.
- (vi) Any provision of the ARP that applies to an affected unit (including a provision applicable to the DR of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR § 72.44 (Phase II repowering extension plans) and 40 CFR § 76.11 (NO averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR §§ 75.16, 75.17, and 75.18), the owners and operators and the DR of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the DR and that is located at a source of which they are not owners or operators or the DR.
- (vii) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or DR of such source or unit, shall be a separate violation of the FCAA Amendments.

- H. Effect on other authorities. No provision of the ARP, an acid rain permit application, an acid rain permit, or an exemption under 40 CFR §§ 72.7 or 72.8 shall be construed as:
 - (i) Except as expressly provided in Title IV of the FCAA Amendments, exempting or excluding the owners and operators and, to the extent applicable, the DR of an affected source or affected unit from compliance with any other provision of the FCAA Amendments, including the provisions of Title I of the FCAA Amendments relating to applicable National Ambient Air Quality Standards or State Implementation Plans.
 - (ii) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the FCAA Amendments.
 - (iii) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law.
 - (iv) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
 - (v) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.
- I. The number of SO₂ allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

Clean Air Interstate Rule Permit Requirements

20. For units STACK1, STACK2, STACK3 and STACK4 (identified on the Certificate of Representation as units STK1, STK2, STK3 and STK4), located at the affected source identified by ORIS/Facility code (55144), the designated representative and the owner or operator, as applicable, shall comply with the following Clean Air Interstate Rule (CAIR) Permit requirements. Until approval of the Texas CAIR SIP, the permit holder shall comply with the equivalent requirements of 40 CFR Part 97 in place of the referenced 40 CFR Part 96 requirements in the Texas CAIR permit and 30 TAC Chapter 122 requirements.

A. General Requirements

- (i) Under 30 TAC § 122.420(b) and 40 CFR §§ 96.120(b) and 96.220(b) the CAIR Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP).
- (ii) The owners and operators of the CAIR NO_x and the CAIR SO₂ source shall operate the source and the unit in compliance with the requirements of this CAIR permit and all other applicable State and federal requirements.
- (iii) The owners and operators of the CAIR NO and the CAIR SO source shall comply with the General Terms and Conditions of the FOP that incorporates this CAIR Permit.

(iv) The term for the initial CAIR permit shall commence with the issuance of the revision containing the CAIR permit and shall be the remaining term for the FOP that incorporates the CAIR permit. Renewal of the initial CAIR permit shall coincide with the renewal of the FOP that incorporates the CAIR permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring and Reporting Requirements

- (i) The owners and operators, and the CAIR designated representative, of the CAIR NO_x source and each CAIR NO_x unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HH.
- (ii) The owners and operators, and the CAIR designated representative, of the CAIR SO₂ source and each CAIR SO₂ unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HHH.
- (iii) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH and any other credible evidence shall be used to determine compliance by the CAIR NO_x source with the CAIR NO_x emissions limitation.
- (iv) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH and any other credible evidence shall be used to determine compliance by the CAIR ${\rm SO_2}$ source with the CAIR ${\rm SO_2}$ emissions limitation.

C. NO emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR NO $_{\rm x}$ source and each CAIR NO $_{\rm x}$ unit at the source shall hold, in the source's compliance account, CAIR NO $_{\rm x}$ allowances available for compliance deductions for the control period under 40 CFR § 96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO $_{\rm x}$ units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HH.
- (ii) A CAIR NO_x unit shall be subject to the requirements of paragraph C.(i) of this CAIR Permit starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.170(b)(1), (2), or (5).
- (iii) A CAIR NO_x allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.
- (iv) CAIR NO_x allowances shall be held in, deducted from or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FF or Subpart GG.

- (v) A CAIR NO_x allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR NO, allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FF or Subpart GG, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x unit's compliance account is incorporated automatically in this CAIR permit.

D. NO excess emissions requirement

- (i) If a CAIR NO source emits nitrogen oxides during any control period in excess of the CAIR NO emissions limitation, the owners and operators of the source and each CAIR NO unit at the source shall surrender the CAIR NO allowances required for deduction under 40 CFR § 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable State law.

E. SO₂ emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR SO $_2$ source and each CAIR SO $_2$ unit at the source shall hold, in the source's compliance account, CAIR SO $_2$ allowances available for compliance deductions for the control period under 40 CFR § 96.254(a) and (b) in an amount not less than the tons of total sulfur dioxides emissions for the control period from all CAIR SO $_2$ units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HHH.
- (ii) A CAIR SO₂ unit shall be subject to the requirements of paragraph E.(i) of this CAIR Permit starting on the later of January 1, 2010, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.270(b)(1), (2), or (5).
- (iii) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.
- (iv) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FFF or Subpart GGG.

- (v) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR SO allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or Subpart GGG, every allocation, transfer, or deduction of a CAIR SO_2 allowance to or from a CAIR SO_2 unit's compliance account is incorporated automatically in this CAIR permit.

F. SO₂ excess emissions requirements

- (i) If a CAIR SO₂ source emits sulfur dioxides during any control period in excess of the CAIR SO₂ emissions limitation, the owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under 40 CFR § 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable State law.

G. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source and the CAIR SO₂ source and each CAIR SO₂ unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.
 - (1) The certificate of representation under 40 CFR §§ 96.113 and 96.213 for the CAIR NO_x designated representative for the source and each CAIR NO_x unit and the CAIR SO_x designated representative for the source and each CAIR SO_x unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5 year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR §§ 96.113 and 96.213 changing the CAIR designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH and Subpart HHH, provided that to the extent that these subparts provide for a 3-year period for recordkeeping, the 3-year period shall apply.

- (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO Annual Trading Program and CAIR SO₂ Trading Program or relied upon for compliance determinations.
- (4) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program.
- (ii) The CAIR designated representative of a CAIR NO $_{\rm x}$ source and each CAIR NO $_{\rm x}$ unit at the source and a CAIR SO $_{\rm 2}$ source and each CAIR SO $_{\rm 2}$ unit at the source shall submit the reports required under the CAIR NO $_{\rm x}$ Annual Trading Program and the CAIR SO $_{\rm 2}$ Trading Program including those under 40 CFR Part 96, Subpart HH and Subpart HHH.
- H. The CAIR NO $_{\rm x}$ source and each CAIR NO $_{\rm x}$ unit shall meet the requirements of the CAIR NO Annual Trading Program contained in 40 CFR Part 96, Subparts AA through II.
- I. The CAIR SO_2 source and each CAIR SO_2 unit shall meet the requirements of the CAIR SO_2 Trading Program contained in 40 CFR Part 96, Subparts AAA through III
- J. Any provision of the CAIR NO $_{\rm x}$ Annual Trading Program and the CAIR SO $_{\rm 2}$ Trading Program that applies to a CAIR NO $_{\rm x}$ source or CAIR SO $_{\rm 2}$ source or the CAIR designated representative of a CAIR NO $_{\rm x}$ source or CAIR SO $_{\rm 2}$ source shall also apply to the owners and operators of such source and the units at the source.
- K. Any provision of the CAIR NO_x Annual Trading Program and the CAIR SO₂

 Trading Program that applies to a CAIR NO_x unit or CAIR SO₂ unit or the CAIR designated representative of a CAIR NO_x unit or CAIR SO₂ unit shall also apply to the owners and operators of such unit.
- L. No provision of the CAIR NO $_{\rm x}$ Annual Trading Program, CAIR SO $_{\rm z}$ Trading Program, a CAIR permit application, a CAIR permit, or an exemption under 40 CFR §§ 96.105 or 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO source or CAIR NO $_{\rm x}$ unit or a CAIR SO $_{\rm z}$ source or CAIR SO $_{\rm z}$ unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

| Unit Summary | 23 |
|---------------------------------|----|
| , | |
| Applicable Requirements Summary | 25 |

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|--------------------------|---------------|--|-------------------------|
| ENG1 | SRIC ENGINES | N/A | 63ZZZZ | 40 CFR Part 63, Subpart ZZZZ | No changing attributes. |
| ENG2 | SRIC ENGINES | N/A | 63ZZZZ | 40 CFR Part 63, Subpart ZZZZ | No changing attributes. |
| ENG3 | SRIC ENGINES | N/A | 63ZZZZ | 40 CFR Part 63, Subpart ZZZZ | No changing attributes. |
| ENG4 | SRIC ENGINES | N/A | 63ZZZZ | 40 CFR Part 63, Subpart ZZZZ | No changing attributes. |
| ENG5 | SRIC ENGINES | N/A | 63ZZZZ | 40 CFR Part 63, Subpart ZZZZ | No changing attributes. |
| STACK1 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1111-01 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| STACK1 | STATIONARY TURBINES | N/A | 60GG-01 | 40 CFR Part 60, Subpart GG | No changing attributes. |
| STACK1 | STATIONARY TURBINES | N/A | 60GG-02 | 40 CFR Part 60, Subpart GG | No changing attributes. |
| STACK2 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1111-01 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| STACK2 | STATIONARY TURBINES | N/A | 60GG-01 | 40 CFR Part 60, Subpart GG | No changing attributes. |
| STACK2 | STATIONARY TURBINES | N/A | 60GG-02 | 40 CFR Part 60, Subpart GG | No changing attributes. |
| STACK3 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1111-01 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|--------------------------|---------------|--|-------------------------|
| STACK3 | STATIONARY TURBINES | N/A | 60GG-01 | 40 CFR Part 60, Subpart GG | No changing attributes. |
| STACK3 | STATIONARY TURBINES | N/A | 60GG-02 | 40 CFR Part 60, Subpart GG | No changing attributes. |
| STACK4 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1111-01 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| STACK4 | STATIONARY TURBINES | N/A | 60GG-01 | 40 CFR Part 60, Subpart GG | No changing attributes. |
| STACK4 | STATIONARY TURBINES | N/A | 60GG-02 | 40 CFR Part 60, Subpart GG | No changing attributes. |

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|------------------------------------|----------------------------------|---------------------|----------------|--|---|---|---|--|---|
| ENG1 | EU | 63ZZZZ | 112(B) HAPS | 40 CFR Part 63, Subpart ZZZZ | § 63.6603(a)- Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) [G]§ 63.6640(f)(1) | For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c. | § 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)- Table6.9.a.i § 63.6640(a)- Table6.9.a.ii § 63.6640(b) | \$ 63.6625(i) \$ 63.6655(a) \$ 63.6655(a)(1) \$ 63.6655(a)(2) \$ 63.6655(a)(4) \$ 63.6655(a)(5) \$ 63.6655(d) \$ 63.6655(e) \$ 63.6655(f) \$ 63.6660(a) \$ 63.6660(b) \$ 63.6660(c) | § 63.6640(b) § 63.6640(e) § 63.6650(f) |
| ENG2 | EU | 63ZZZZ | 112(B) HAPS | 40 CFR Part 63, Subpart ZZZZ | § 63.6603(a)- Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) [G]§ 63.6640(f)(1) | For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c. | § 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)- Table6.9.a.i § 63.6640(a)- Table6.9.a.ii § 63.6640(b) | \$ 63.6625(i) \$ 63.6655(a) \$ 63.6655(a)(1) \$ 63.6655(a)(2) \$ 63.6655(a)(4) \$ 63.6655(a)(5) \$ 63.6655(d) \$ 63.6655(e) \$ 63.6655(f) \$ 63.6660(a) \$ 63.6660(b) \$ 63.6660(c) | § 63.6640(b) § 63.6640(e) § 63.6650(f) |
| ENG3 | EU | 63ZZZZ | 112(B) HAPS | 40 CFR Part 63, Subpart ZZZZ | § 63.6603(a)- Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) [G]§ 63.6640(f)(1) | For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c. | \$ 63.6625(f) \$ 63.6625(i) \$ 63.6640(a) \$ 63.6640(a)- Table6.9.a.i \$ 63.6640(a)- Table6.9.a.ii \$ 63.6640(b) | § 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(a)(2) § 63.6655(a)(4) § 63.6655(d) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c) | § 63.6640(b) § 63.6640(e) § 63.6650(f) |

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|------------------------------------|----------------------------------|---------------------|----------------|--|---|--|---|--|---|
| ENG4 | EU | 63ZZZZ | 112(B) HAPS | 40 CFR Part 63, Subpart ZZZZ | § 63.6603(a)- Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) [G]§ 63.6640(f)(1) | For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c. | § 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)- Table6.9.a.i § 63.6640(a)- Table6.9.a.ii § 63.6640(b) | \$ 63.6625(i) \$ 63.6655(a) \$ 63.6655(a)(1) \$ 63.6655(a)(2) \$ 63.6655(a)(4) \$ 63.6655(a)(5) \$ 63.6655(d) \$ 63.6655(e) \$ 63.6655(f) \$ 63.6660(a) \$ 63.6660(b) \$ 63.6660(c) | § 63.6640(b) § 63.6640(e) § 63.6650(f) |
| ENG5 | EU | 63ZZZZ | 112(B) HAPS | 40 CFR Part 63, Subpart ZZZZ | § 63.6603(a)- Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) [G]§ 63.6640(f)(1) | For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c. | § 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)- Table6.9.a.i § 63.6640(a)- Table6.9.a.ii § 63.6640(b) | § 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(a)(2) § 63.6655(a)(4) § 63.6655(a)(5) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c) | § 63.6640(b) § 63.6640(e) § 63.6650(f) |
| STACK1 | EP | R1111-01 | OPACITY | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(C) § 111.111(a)(1)(E) | Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed. | [G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary | None | None |

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|------------------------------------|----------------------------------|---------------------|-----------|--|---|--|--|---|---|
| STACK1 | EU | 60GG-01 | SO2 | 40 CFR Part 60, Subpart GG | § 60.333(b) | No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight. | § 60.334(h) [G]§ 60.334(h)(3) | None | None |
| STACK1 | EU | 60GG-01 | NOX | 40 CFR Part 60, Subpart GG | § 60.332(a)(1) § 60.332(a)(3) | No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation. | [G]§ 60.334(b) § 60.334(j) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(1) § 60.335(b)(2) § 60.335(c)(1) *** See CAM Summary | [G]§ 60.334(b) | § 60.334(j) § 60.334(j)(5) |
| STACK1 | EU | 60GG-02 | SO2 | 40 CFR Part 60, Subpart GG | § 60.333(b) | No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight. | \$ 60.334(h) \$ 60.334(h)(1) \$ 60.334(i) \$ 60.334(j)(1) \$ 60.334(j)(2)(i) \$ 60.334(j)(2)(ii) \$ 60.335(b)(10) \$ 60.335(b)(10)(i) | § 60.334(i) § 60.334(i)(1) | None |
| STACK1 | EU | 60GG-02 | NOX | 40 CFR Part 60, Subpart GG | § 60.332(a)(1) § 60.332(a)(3) | No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation. | [G]§ 60.334(b) § 60.334(j) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(1) § 60.335(b)(2) § 60.335(c)(1) *** See CAM Summary | [G]§ 60.334(b) | § 60.334(j) § 60.334(j)(5) |

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|------------------------------------|----------------------------------|---------------------|-----------|--|---|--|--|---|---|
| STACK2 | EP | R1111-01 | OPACITY | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(C) § 111.111(a)(1)(E) | Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed. | [G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary | None | None |
| STACK2 | EU | 60GG-01 | SO2 | 40 CFR Part 60, Subpart GG | § 60.333(b) | No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight. | § 60.334(h) [G]§ 60.334(h)(3) | None | None |
| STACK2 | EU | 60GG-01 | NOX | 40 CFR Part 60, Subpart GG | § 60.332(a)(1) § 60.332(a)(3) | No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation. | [G]§ 60.334(b) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(1) § 60.335(b)(2) § 60.335(c)(1) *** See CAM Summary | [G]§ 60.334(b) | § 60.334(j) § 60.334(j)(5) |
| STACK2 | EU | 60GG-02 | SO2 | 40 CFR Part 60, Subpart GG | § 60.333(b) | | \$ 60.334(h) \$ 60.334(h)(1) \$ 60.334(i) \$ 60.334(j)(1) \$ 60.334(j)(2)(i) \$ 60.334(j)(2)(ii) \$ 60.335(b)(10) \$ 60.335(b)(10)(i) | § 60.334(i) § 60.334(i)(1) | None |

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|------------------------------------|----------------------------------|---------------------|-----------|--|---|--|---|---|---|
| STACK2 | EU | 60GG-02 | NOX | 40 CFR Part 60, Subpart GG | § 60.332(a)(1) § 60.332(a)(3) | No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation. | [G]§ 60.334(b) § 60.334(j) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(1) § 60.335(b)(2) § 60.335(c)(1) ** See CAM Summary | [G]§ 60.334(b) | § 60.334(j) § 60.334(j)(5) |
| STACK3 | EP | R1111-01 | OPACITY | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(C) § 111.111(a)(1)(E) | Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed. | [G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary | None | None |
| STACK3 | EU | 60GG-01 | SO2 | 40 CFR Part 60, Subpart GG | § 60.333(b) | No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight. | § 60.334(h) [G]§ 60.334(h)(3) | None | None |
| STACK3 | EU | 60GG-01 | NOX | 40 CFR Part 60, Subpart GG | § 60.332(a)(1) § 60.332(a)(3) | No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation. | [G]§ 60.334(b) § 60.334(j) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(1) § 60.335(b)(2) § 60.335(c)(1) ** See CAM Summary | [G]§ 60.334(b) | § 60.334(j) § 60.334(j)(5) |

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|------------------------------------|----------------------------------|---------------------|-----------|--|--|--|---|---|---|
| STACK3 | EU | 60GG-02 | SO2 | 40 CFR Part 60, Subpart GG | § 60.333(b) | No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight. | \$ 60.334(h) \$ 60.334(h)(1) \$ 60.334(i) \$ 60.334(i)(1) \$ 60.334(j)(2)(i) \$ 60.334(j)(2)(ii) \$ 60.335(b)(10) \$ 60.335(b)(10)(i) | § 60.334(i) § 60.334(i)(1) | None |
| STACK3 | EU | 60GG-02 | NOX | 40 CFR Part 60, Subpart GG | § 60.332(a)(1) § 60.332(a)(3) | No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation. | [G]§ 60.334(b) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(1) § 60.335(b)(2) § 60.335(c)(1) *** See CAM Summary | [G]§ 60.334(b) | § 60.334(j) § 60.334(j)(5) |
| STACK4 | EP | R1111-01 | OPACITY | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(C) § 111.111(a)(1)(E) | Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed. | [G]S 111.111(a)(1)(F) ** See Periodic Monitoring Summary | None | None |
| STACK4 | EU | 60GG-01 | SO2 | 40 CFR Part 60, Subpart GG | § 60.333(b) | No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight. | § 60.334(h) [G]§ 60.334(h)(3) | None | None |

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|------------------------------------|----------------------------------|---------------------|-----------|--|---|--|--|---|---|
| STACK4 | EU | 60GG-01 | NOX | 40 CFR Part 60, Subpart GG | § 60.332(a)(1) § 60.332(a)(3) | No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation. | [G]§ 60.334(b) § 60.334(j) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(1) § 60.335(b)(2) § 60.335(c)(1) *** See CAM Summary | [G]§ 60.334(b) | § 60.334(j) § 60.334(j)(5) |
| STACK4 | EU | 60GG-02 | SO2 | 40 CFR Part 60, Subpart GG | § 60.333(b) | No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight. | \$ 60.334(h) \$ 60.334(h)(1) \$ 60.334(i) \$ 60.334(j)(1) \$ 60.334(j)(2)(i) \$ 60.334(j)(2)(ii) \$ 60.335(b)(10) \$ 60.335(b)(10)(i) | § 60.334(i) § 60.334(i)(1) | None |
| STACK4 | EU | 60GG-02 | NOX | 40 CFR Part 60, Subpart GG | § 60.332(a)(1) § 60.332(a)(3) | No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation. | [G]§ 60.334(b) § 60.334(j) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(1) § 60.335(b)(2) § 60.335(c)(1) *** See CAM Summary | [G]§ 60.334(b) | § 60.334(j) § 60.334(j)(5) |

Additional Monitoring Requirements

| Compliance Assurance Monitoring Summary | 33 |
|---|----|
| | |
| Periodic Monitoring Summary | 41 |

CAM Summary

| Unit/Group/Process Information | | |
|--|---|--|
| ID No.: STACK1 | | |
| Control Device ID No.: N/A | Control Device Type: Selective Catalytic Reduction (SCR) | |
| Applicable Regulatory Requirement | | |
| Name: 40 CFR Part 60, Subpart GG | SOP Index No.: 60GG-01 | |
| Pollutant: NOX | Main Standard: § 60.332(a)(1) | |
| Monitoring Information | | |
| Indicator: Nitrogen oxides concentration | | |
| Minimum Frequency: Four times per hour | | |
| Averaging Period: One hour | | |
| Deviation Limit: Greater than 5 ppmv NOx when corrected to 15 percent oxygen, except during periods of start-up or shutdown. | | |

CAM Text: Use a continuous emission monitoring system (CEMS) to measure and record the concentration of nitrogen oxides from the combustion turbine generator stack. The CEMS

shall be operated in accordance with Special Condition 12 (Continuous Determination of Compliance) of NSR permit 40040/PSDTX923.

CAM Summary

| Unit/Group/Process Information | | |
|--|---|--|
| ID No.: STACK1 | | |
| Control Device ID No.: N/A | Control Device Type: Selective Catalytic Reduction (SCR) | |
| Applicable Regulatory Requirement | | |
| Name: 40 CFR Part 60, Subpart GG | SOP Index No.: 60GG-02 | |
| Pollutant: NOX | Main Standard: § 60.332(a)(1) | |
| Monitoring Information | | |
| Indicator: Nitrogen oxides concentration | | |
| Minimum Frequency: Four times per hour | | |
| Averaging Period: One hour | | |
| Deviation Limit: Greater than 9 ppmv NOx when corrected to 15 percent oxygen, except during periods of start-up or shutdown. | | |

CAM Text: Use a continuous emission monitoring system (CEMS) to measure and record the concentration of nitrogen oxides from the combustion turbine generator stack. The CEMS shall be operated in accordance with Special Condition 12 (Continuous Determination of Compliance) of NSR permit 40040/PSDTX923.

| Unit/Group/Process Information | | | |
|--|---|--|--|
| ID No.: STACK2 | | | |
| Control Device ID No.: N/A | Control Device Type: Selective Catalytic Reduction (SCR) | | |
| Applicable Regulatory Requirement | | | |
| Name: 40 CFR Part 60, Subpart GG | SOP Index No.: 60GG-01 | | |
| Pollutant: NOX | Main Standard: § 60.332(a)(1) | | |
| Monitoring Information | | | |
| Indicator: Nitrogen oxides concentration | | | |
| Minimum Frequency: Four times per hour | | | |
| Averaging Period: One hour | | | |
| Deviation Limit: Greater than 5 ppmv NOx when corrected to 15 percent oxygen, except during periods of start-up or shutdown. | | | |

| Unit/Group/Process Information | | | |
|--|---|--|--|
| ID No.: STACK2 | | | |
| Control Device ID No.: N/A | Control Device Type: Selective Catalytic Reduction (SCR) | | |
| Applicable Regulatory Requirement | | | |
| Name: 40 CFR Part 60, Subpart GG | SOP Index No.: 60GG-02 | | |
| Pollutant: NOX | Main Standard: § 60.332(a)(1) | | |
| Monitoring Information | | | |
| Indicator: Nitrogen oxides concentration | | | |
| Minimum Frequency: Four times per hour | | | |
| Averaging Period: One hour | | | |
| Deviation Limit: Greater than 9 ppmv NOx when corrected to 15 percent oxygen, except during periods of start-up or shutdown. | | | |

| Unit/Group/Process Information | | | |
|--|---|--|--|
| ID No.: STACK3 | | | |
| Control Device ID No.: N/A | Control Device Type: Selective Catalytic Reduction (SCR) | | |
| Applicable Regulatory Requirement | | | |
| Name: 40 CFR Part 60, Subpart GG | SOP Index No.: 60GG-01 | | |
| Pollutant: NOX | Main Standard: § 60.332(a)(1) | | |
| Monitoring Information | | | |
| Indicator: Nitrogen oxides concentration | | | |
| Minimum Frequency: Four times per hour | | | |
| Averaging Period: One hour | | | |
| Deviation Limit: Greater than 5 ppmv NOx when corrected to 15 percent oxygen, except during periods of start-up or shutdown. | | | |

| Unit/Group/Process Information | | | |
|--|---|--|--|
| ID No.: STACK3 | | | |
| Control Device ID No.: N/A | Control Device Type: Selective Catalytic Reduction (SCR) | | |
| Applicable Regulatory Requirement | | | |
| Name: 40 CFR Part 60, Subpart GG | SOP Index No.: 60GG-02 | | |
| Pollutant: NOX | Main Standard: § 60.332(a)(1) | | |
| Monitoring Information | | | |
| Indicator: Nitrogen oxides concentration | | | |
| Minimum Frequency: Four times per hour | | | |
| Averaging Period: One hour | | | |
| Deviation Limit: Greater than 9 ppmv NOx when corrected to 15 percent oxygen, except during periods of start-up or shutdown. | | | |

| Unit/Group/Process Information | | | |
|--|---|--|--|
| ID No.: STACK4 | | | |
| Control Device ID No.: N/A | Control Device Type: Selective Catalytic Reduction (SCR) | | |
| Applicable Regulatory Requirement | | | |
| Name: 40 CFR Part 60, Subpart GG | SOP Index No.: 60GG-01 | | |
| Pollutant: NOX | Main Standard: § 60.332(a)(1) | | |
| Monitoring Information | | | |
| Indicator: Nitrogen oxides concentration | | | |
| Minimum Frequency: Four times per hour | | | |
| Averaging Period: One hour | | | |
| Deviation Limit: Greater than 5 ppmv NOx when corrected to 15 percent oxygen, except during periods of start-up or shutdown. | | | |

| Unit/Group/Process Information | | | |
|--|---|--|--|
| ID No.: STACK4 | | | |
| Control Device ID No.: N/A | Control Device Type: Selective Catalytic Reduction (SCR) | | |
| Applicable Regulatory Requirement | | | |
| Name: 40 CFR Part 60, Subpart GG | SOP Index No.: 60GG-02 | | |
| Pollutant: NOX | Main Standard: § 60.332(a)(1) | | |
| Monitoring Information | | | |
| Indicator: Nitrogen oxides concentration | | | |
| Minimum Frequency: Four times per hour | | | |
| Averaging Period: One hour | | | |
| Deviation Limit: Greater than 9 ppmv NOx when corrected to 15 percent oxygen, except during periods of start-up or shutdown. | | | |

| T. 1. (C. (D. T. C.) | | | |
|---|-----------------------------------|--|--|
| Unit/Group/Process Information | | | |
| ID No.: STACK1 | | | |
| Control Device ID No.: N/A Control Device Type: N/A | | | |
| Applicable Regulatory Requirement | | | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-01 | | |
| Pollutant: OPACITY | Main Standard: § 111.111(a)(1)(C) | | |
| Monitoring Information | | | |
| Indicator: Fuel Type | | | |

Minimum Frequency: Annually or at any time an alternate fuel is used

Averaging Period: n/a

Deviation Limit: The presence of visible emissions unless an opacity test, as specified in §111.111(a)(1)(F), is performed and the source is determined to be in compliance. However, if the source is out of compliance, a deviation shall be reported.

Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.

| Unit/Group/Process Information | | |
|---|-----------------------------------|--|
| ID No.: STACK2 | | |
| Control Device ID No.: N/A Control Device Type: N/A | | |
| Applicable Regulatory Requirement | | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-01 | |
| Pollutant: OPACITY | Main Standard: § 111.111(a)(1)(C) | |
| Monitoring Information | | |
| Indicator: Fuel Type | | |
| | | |

Averaging Period: n/a

Deviation Limit: The presence of visible emissions unless an opacity test, as specified in §111.111(a)(1)(F), is performed and the source is determined to be in compliance. However, if the source is out of compliance, a deviation shall be reported.

Minimum Frequency: Annually or at any time an alternate fuel is used

Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.

| Unit/Group/Process Information | | | |
|---|-----------------------------------|--|--|
| ID No.: STACK3 | | | |
| Control Device ID No.: N/A Control Device Type: N/A | | | |
| Applicable Regulatory Requirement | | | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-01 | | |
| Pollutant: OPACITY | Main Standard: § 111.111(a)(1)(C) | | |
| Monitoring Information | | | |
| Indicator: Fuel Type | | | |

Minimum Frequency: Annually or at any time an alternate fuel is used Averaging Period: n/a

Deviation Limit: The presence of visible emissions unless an opacity test, as specified in §111.111(a)(1)(F), is performed and the source is determined to be in compliance. However, if the source is out of compliance, a deviation shall be reported.

Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.

| Unit/Group/Process Information | | | |
|---|-----------------------------------|--|--|
| ID No.: STACK4 | | | |
| Control Device ID No.: N/A Control Device Type: N/A | | | |
| Applicable Regulatory Requirement | | | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-01 | | |
| Pollutant: OPACITY | Main Standard: § 111.111(a)(1)(C) | | |
| Monitoring Information | | | |
| Indicator: Fuel Type | | | |

Minimum Frequency: Annually or at any time an alternate fuel is used

Averaging Period: n/a

Deviation Limit: The presence of visible emissions unless an opacity test, as specified in §111.111(a)(1)(F), is performed and the source is determined to be in compliance. However, if the source is out of compliance, a deviation shall be reported.

Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.

| | Permit Shield | |
|---------------|---------------|----|
| Permit Shield | | 46 |

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

| Unit/Gro | up/Process | Regulation | Basis of Determination |
|----------|-----------------------|------------------------------|--|
| ID No. | Group/Inclusive Units | | |
| ENG1 | N/A | 40 CFR Part 60, Subpart IIII | Engine constructed before July 11, 2005 |
| ENG2 | N/A | 40 CFR Part 60, Subpart IIII | Engine constructed before July 11, 2005 |
| ENG3 | N/A | 40 CFR Part 60, Subpart IIII | Engine constructed before July 11, 2005 |
| ENG4 | N/A | 40 CFR Part 60, Subpart IIII | Engine constructed before July 11, 2005 |
| ENG5 | N/A | 40 CFR Part 60, Subpart IIII | FW Pump - Engine constructed before July 1, 2006 |

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

| Prevention of Significant Deterioration (PSD) Permits | | | | | | |
|--|---|--|--|--|--|--|
| PSD Permit No.: PSDTX923 | Issuance Date: 04/06/2016 | | | | | |
| Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area. | | | | | | |
| Authorization No.: 40040 | Issuance Date: 04/06/2016 | | | | | |
| Permits By Rule (30 TAC Chapter 106) for | Permits By Rule (30 TAC Chapter 106) for the Application Area | | | | | |
| Number: 106.183 | Version No./Date: 09/04/2000 | | | | | |
| Number: 106.227 | Version No./Date: 09/04/2000 | | | | | |
| Number: 106.263 | Version No./Date: 11/01/2001 | | | | | |
| Number: 106.371 | Version No./Date: 09/04/2000 | | | | | |
| Number: 106.372 | Version No./Date: 09/04/2000 | | | | | |
| Number: 106.373 | Version No./Date: 09/04/2000 | | | | | |
| Number: 106.452 | Version No./Date: 09/04/2000 | | | | | |
| Number: 106.454 | Version No./Date: 11/01/2001 | | | | | |
| Number: 106.472 | Version No./Date: 09/04/2000 | | | | | |
| Number: 106.473 | Version No./Date: 09/04/2000 | | | | | |
| Number: 106.476 | Version No./Date: 09/04/2000 | | | | | |
| Number: 106.511 | Version No./Date: 09/04/2000 | | | | | |
| Number: 106.532 | Version No./Date: 09/04/2000 | | | | | |

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

| Unit/Group/Process ID No. | Emission Unit Name/Description | New Source Review Authorization | |
|------------------------------|---------------------------------|---------------------------------|--|
| COOL3 | COOLING TOWER FOR UNIT 3 | 106.371/09/04/2000 | |
| COOL4 | COOLING TOWER FOR UNIT 4 | 106.371/09/04/2000 | |
| ENG1 | EMERGENCY DIESEL GENERATOR 1 | 106.511/09/04/2000 | |
| ENG2 | EMERGENCY DIESEL GENERATOR 2 | 106.511/09/04/2000 | |
| ENG3 | EMERGENCY DIESEL GENERATOR 3 | 106.511/09/04/2000 | |
| ENG4 | EMERGENCY DIESEL GENERATOR 4 | 106.511/09/04/2000 | |
| ENG5 | EMERGENCY DIESEL GENERATOR 5 | 106.511/09/04/2000 | |
| STACK1 | COMBUSTION TURBINE UNIT 1 | 40040, PSDTX923 | |
| STACK1 | COMBUSTION TURBINE UNIT 1 STACK | 40040, PSDTX923 | |
| STACK2 | COMBUSTION TURBINE UNIT 2 | 40040, PSDTX923 | |
| STACK2 | COMBUSTION TURBINE UNIT 2 STACK | 40040, PSDTX923 | |
| STACK3 | COMBUSTION TURBINE UNIT 3 | 40040, PSDTX923 | |
| STACK3 | COMBUSTION TURBINE UNIT 3 STACK | 40040, PSDTX923 | |
| STACK4 | COMBUSTION TURBINE UNIT 4 | 40040, PSDTX923 | |
| STACK4 | COMBUSTION TURBINE UNIT 4 STACK | 40040, PSDTX923 | |

| Appendix A |
|--------------|
| Acronym List |

Acronym List

The following abbreviations or acronyms may be used in this permit:

| ACFM | actual cubic feet per minute |
|-----------------|---|
| | alternate means of control |
| | Acid Rain Program |
| | American Society of Testing and Materials |
| | Beaumont/Port Arthur (nonattainment area) |
| | Compliance Assurance Monitoring |
| | control device |
| | continuous opacity monitoring system |
| | closed-vent system |
| | Dallas/Fort Worth (nonattainment area) |
| • | Designated Representative |
| | El Paso (nonattainment area) |
| | emission point |
| EPA | U.S. Environmental Protection Agency |
| EU | emission unit |
| | Federal Clean Air Act Amendments |
| | federal operating permit |
| | grandfathered |
| | grains per 100 standard cubic feet |
| | hazardous air pollutant |
| H/G/B | Houston/Galveston/Brazoria (nonattainment area) |
| | hydrogen sulfide |
| | identification number |
| lb/hr | pound(s) per hour |
| MMBtu/hr | Million British thermal units per hour |
| MRRT | monitoring, recordkeeping, reporting, and testing |
| | nonattainment |
| | not applicable |
| | National Allowance Data Base |
| NO _v | nitrogen oxides |
| NSPS | New Source Performance Standard (40 CFR Part 60) |
| | New Source Review |
| | Office of Regulatory Information Systems |
| | lead |
| | Permit By Rule |
| | particulate matter |
| | parts per million by volume |
| | prevention of significant deterioration |
| | Responsible Official |
| | sulfur dioxide |
| | Texas Commission on Environmental Quality |
| | total suspended particulate |
| | true vapor pressure |
| | United States Code |
| VOC | volatile organic compound |

| | Appendix B | |
|-------------------------|------------|--------|
| Major NSR Summary Table | | 53 |
| | | |

| Permit Number: 40040 and PSDTX923 | | Issuance Date: 04/06/2016 | | | | | | |
|-----------------------------------|--|---------------------------|----------|----------|-------------------------------------|----------------------------------|---------------------------|--|
| Emission | Source | Air Contaminant | Emissi | on Rates | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements | |
| Point No. (1) | Name (2) | Name (3) | lbs/hour | TPY (4) | Spec. Cond. | Spec. Cond. | Spec. Cond. | |
| STACK1 | Combustion | NOx | 34 | | 8, 10, 11, 12, 13, 14 | 6, 8, 10, 11, 12, 13, | 8, 10, 11, 12, 22, | |
| | Turbine Model | CO | 254 | | | 14, 20, 21 | 23 | |
| | ABBGT24 | VOC | 17.6 | | | | | |
| | Natural Gas Firing | SO2 | 4.2 | | | | | |
| | | PM10 | 20 | | | | | |
| | Normal, Hold Point 2 | NH3 | 25.2 | | | | | |
| STACK1 | ABBGT24 | NOx | 34 | | 8, 10, 11, 12, 13, 14 | 6, 8, 10, 11, 12, 13, | 8, 10, 11, 12, 22, 23 | |
| | | CO | 105 | | | 14, 20, 21 | | |
| | Natural Gas Firing | VOC | 10 | | | | | |
| | Steam Injection | SO2 | 5.2 | | | | | |
| | Mode | PM10 | 24.3 | | | | | |
| | | NH3 | 24.7 | | | | | |
| STACK1 | ABBGT24 | NOx | 77 | | 8, 10, 11, 12, 13, 14 | 6, 8, 10, 11, 12, 13, 14, 20, 21 | 8, 10, 11, 12, 22, 23 | |
| | E 100E | CO | 310 | | | | | |
| | Fuel Oil Firing | VOC | 18 | | | | | |
| | | SO2 | 111 | | | | | |
| | | PM10 | 112 | | | | | |
| | | NH3 | 31.1 | | | | | |
| STACK1 | ABB GT24 | NOx | 990 | | 10, 11, 12, 13 | 10, 11, 12, 13, 17, | 10, 11, 12, 22 | |
| | Startup and | CO | 2,100 | | | 18, 20, 21 | | |
| | Shutdown Operation, and Transient Operation (5)(6) | VOC | 132 | | | | | |
| STACK1 | ABB GT24 Maintenance/CT Tuning (5)(6) | СО | 3,500 | | 10, 11, 12, 13 | 10, 11, 12, 13, 18, 20, 21 | 10, 11, 12, 22 | |

| Permit Number: 4 | 0040 and PSDTX923 | Issuance Date: 04/06/2016 | | | | | | |
|---------------------------|--|-----------------------------|------------------|----------|---|--|--|--|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emissic lbs/hour | on Rates | Monitoring and Testing Requirements Spec. Cond. | Recordkeeping Requirements Spec. Cond. | Reporting Requirements Spec. Cond. | |
| | 1 1 | 1 1 | | ` ' | • | • | _ | |
| STACK2 | Combustion Turbine Model | NOx | 34 | | 8, 10, 11, 12, 13, 14 | 6, 8, 10, 11, 12, 13, 14, 20, 21 | 8, 10, 11, 12, 22, 23 | |
| | ABBGT24 | CO | 254 | | - | 14, 20, 21 | 23 | |
| | | VOC | 17.6 | | - | | | |
| | Natural Gas Firing | SO2 | 4.2 | | - | | | |
| | N1 | PM10 | 20 | | - | | | |
| | Normal, Hold Point 2 | NH3 | 25.2 | | | | | |
| STACK2 | ABBGT24 | NOx | 34 | | 8, 10, 11, 12, 13, 14 | 6, 8, 10, 11, 12, 13, | 8, 10, 11, 12, 22, 23 | |
| | 10 70 | CO | 105 | | | 14, 20, 21 | | |
| | Natural Gas Firing | VOC | 10 | | | | | |
| | Steam Injection | SO2 | 5.2 | | | | | |
| | Mode | PM10 | 24.3 | | | | | |
| | | NH3 | 24.7 | | | | | |
| STACK2 | ABBGT24 | NOx | 77 | | 8, 10, 11, 12, 13, 14 | 6, 8, 10, 11, 12, 13, 14, 20, 21 | 8, 10, 11, 12, 22, 23 | |
| | T 1011 TI | CO | 310 | | | | | |
| | Fuel Oil Firing | VOC | 18 | | | | | |
| | | SO2 | 111 | | | | | |
| | | PM10 | 112 | | | | | |
| | | NH3 | 31.1 | | | | | |
| STACK2 | ABB GT24 | NOx | 990 | | 10, 11, 12, 13 | 10, 11, 12, 13, 17, | 10, 11, 12, 22 | |
| | Startup and | CO | 2,100 | | | 18, 20, 21 | | |
| | Shutdown Operation, and Transient Operation (5)(6) | VOC | 132 | | | | | |
| STACK2 | ABB GT24 Maintenance/CT Tuning (5)(6) | СО | 3,500 | | 10, 11, 12, 13 | 10, 11, 12, 13, 18, 20, 21 | 10, 11, 12, 22 | |

| Permit Number: 4 | 0040 and PSDTX923 | Issuance Date: 04/06/2016 | | | | | | |
|------------------------|--|-----------------------------|-------------------|----------|---|--|--|--|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission lbs/hour | on Rates | Monitoring and Testing Requirements Spec. Cond. | Recordkeeping Requirements Spec. Cond. | Reporting Requirements Spec. Cond. | |
| , , | | 1 1 | | ` ' | • | • | _ | |
| STACK3 | Combustion Turbine Model | NOx CO | 34 254 | | 8, 10, 11, 12, 13, 14 | 6, 8, 10, 11, 12, 13, 14, 20, 21 | 8, 10, 11, 12, 22, 23 | |
| | ABBGT24 | | | | 4 | 14, 20, 21 | 23 | |
| | | VOC | 17.6 | | _ | | | |
| | Natural Gas Firing | SO2 PM10 | 4.2 | | 4 | | | |
| | Nowmal | | | | _ | | | |
| | Normal, Hold Point 2 | NH3 | 25.2 | | | | | |
| STACK3 | ABBGT24 | NOx | 34 | | 8, 10, 11, 12, 13, 14 | 6, 8, 10, 11, 12, 13, | 8, 10, 11, 12, 22, 23 | |
| | | СО | 105 | | | 14, 20, 21 | | |
| | Natural Gas Firing | VOC | 10 | | | | | |
| | Steam Injection | SO2 | 5.2 | | | | | |
| | Mode | PM10 | 24.3 | | | | | |
| | 11000 | NH3 | 24.7 | | | | | |
| STACK3 | ABBGT24 | NOx | 77 | | 8, 10, 11, 12, 13, 14 | 6, 8, 10, 11, 12, 13, 14, 20, 21 | 8, 10, 11, 12, 22, 23 | |
| | | CO | 310 | | | | | |
| | Fuel Oil Firing | VOC | 18 | | | | | |
| | | SO2 | 111 | | | | | |
| | | PM10 | 112 | | | | | |
| | | NH3 | 31.1 | | | | | |
| STACK3 | ABB GT24 | NOx | 990 | | 10, 11, 12, 13 | 10, 11, 12, 13, 17, | 10, 11, 12, 22 | |
| | Startup and | CO | 2,100 | | | 18, 20, 21 | | |
| | Shutdown Operation, and Transient Operation (5)(6) | VOC | 132 | | | | | |
| STACK3 | ABB GT24 Maintenance/CT Tuning (5)(6) | СО | 3,500 | | 10, 11, 12, 13 | 10, 11, 12, 13, 18, 20, 21 | 10, 11, 12, 22 | |

| Permit Number: 4 | 0040 and PSDTX923 | Issuance Date: 04/06/2016 | | | | | | |
|---------------------------|--|-----------------------------|-------------------|----------|---|--|--|--|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission lbs/hour | on Rates | Monitoring and Testing Requirements Spec. Cond. | Recordkeeping Requirements Spec. Cond. | Reporting Requirements Spec. Cond. | |
| 1 | 1 | 1 / | | , , | • | • | _ | |
| STACK4 | Combustion Turbine Model | NOx CO | 34 254 | | 8, 10, 11, 12, 13, 14 | 6, 8, 10, 11, 12, 13, 14, 20, 21 | 8, 10, 11, 12, 22, 23 | |
| | ABBGT24 | VOC | 17.6 | | - | 11, 20, 21 | 25 | |
| | | SO2 | 4.2 | | - | | | |
| | Natural Gas Firing | PM10 | 20 | | - | | | |
| | Normal, Hold Point 2 | NH3 | 25.2 | | - | | | |
| STACK4 | ABBGT24 | NOx | 34 | | 8, 10, 11, 12, 13, 14 | 6, 8, 10, 11, 12, 13, | 8, 10, 11, 12, 22, | |
| JIACKI | ADDOTE | CO | 105 | | 0, 10, 11, 12, 13, 14 | 14, 20, 21 | 23 | |
| | Natural Gas Firing | VOC | 103 | | - | | | |
| | | SO2 | 5.2 | | - - - | | | |
| | Steam Injection Mode | PM10 | 24.3 | | | | | |
| | Mode | NH3 | 24.7 | | | | | |
| STACK4 | ABBGT24 | NOx | 77 | | 8, 10, 11, 12, 13, 14 | 6, 8, 10, 11, 12, 13, 14, 20, 21 | 8, 10, 11, 12, 22, 23 | |
| | | СО | 310 | | | | | |
| | Fuel Oil Firing | VOC | 18 | | 7 | | | |
| | | SO2 | 111 | | 7 | | | |
| | | PM10 | 112 | | | | | |
| | | NH3 | 31.1 | | | | | |
| STACK4 | ABB GT24 | NOx | 990 | | 10, 11, 12, 13 | 10, 11, 12, 13, 17, | 10, 11, 12, 22 | |
| | Startup and | CO | 2,100 | | | 18, 20, 21 | | |
| | Shutdown Operation, and Transient Operation (5)(6) | VOC | 132 | | | | | |
| STACK4 | ABB GT24 Maintenance/CT Tuning (5)(6) | СО | 3,500 | | 10, 11, 12, 13 | 10, 11, 12, 13, 18, 20, 21 | 10, 11, 12, 22 | |

| Permit Number: 4 | | Issuance Date: 04/06/2016 | | | | | |
|------------------|---|---------------------------|----------|----------|--|-------------------------------|---------------------------|
| Emission | Source | Air Contaminant | | on Rates | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| Point No. (1) | Name (2) | Name (3) | lbs/hour | TPY (4) | Spec. Cond. | Spec. Cond. | Spec. Cond. |
| STACK1 | ABB GT24 Annual | NOx | | 611.2 | 8, 10, 11, 12, 13, 14 | 6, 8, 10, 11, 12, 13, | 8, 10, 11, 12, 22, |
| STACK2 STACK3 | Emissions | CO | | 865.9 | | 14, 17, 18, 20, 21 | 23 |
| STACK3 STACK4 | Includes all four | VOC | | 132.4 | | | |
| officer i | CTs combined and | SO2 | | 213.2 | | | |
| | all modes of | PM10 | | 478.4 | | | |
| | operation. | NH3 | | 418.8 | | | |
| FUG | Site Fugitives (7) | VOC | 0.29 | 1.27 | | GC7 | |
| | | NH4OH | 0.15 | 0.65 | | | |
| Vent No. 1 | Lube Oil Reservoir Vapor Extractor | VOC | 0.003 | 0.01 | | GC7 | |
| Vent No. 2 | Lube Oil Reservoir Vapor Extractor | VOC | 0.003 | 0.01 | | GC7 | |
| Vent No. 3 | Lube Oil Reservoir Vapor Extractor | VOC | 0.003 | 0.01 | | GC7 | |
| Vent No. 4 | Lube Oil Reservoir Vapor Extractor | VOC | 0.003 | 0.01 | | GC7 | |
| MSS FUG | Inherently Low- | NOx | < 0.01 | < 0.01 | | 18, 21 | |
| | Emitting | CO | 0.04 | 0.01 | | | |
| | Maintenance | VOC | 21 | 1.1 | | | |
| | Activities (7) | PM/PM2.5/PM10 | 4.5 | 0.1 | | | |
| | | NH3 | 6.6 | 0.1 | | | |
| IG1 | Stack 1 Ammonia Injection Grid 1 (7) | NH3 | <0.01 | 0.02 | 7 | 21 | 22 |
| V1 | Stack 1 Ammonia Vaporizer 1 (7) | NH3 | <0.01 | 0.02 | 7 | 21 | 22 |
| IG2 | Stack 2 Ammonia Injection Grid 2 (7) | NH3 | <0.01 | 0.02 | 7 | 21 | 22 |

| Permit Number: 40040 and PSDTX923 | | | | Issuance Date: 04/06/2016 | | | | |
|-----------------------------------|---|-----------------|----------|---------------------------|--|-------------------------------|---------------------------|--|
| Emission | Source | Air Contaminant | Emissi | on Rates | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements | |
| Point No. (1) | Name (2) | Name (3) | lbs/hour | TPY (4) | Spec. Cond. | Spec. Cond. | Spec. Cond. | |
| V2 | Stack 2 Ammonia Vaporizer 2 (7) | NH3 | <0.01 | 0.02 | 7 | 21 | 22 | |
| IG3 | Stack 3 Ammonia Injection Grid 3 (7) | NH3 | <0.01 | 0.02 | 7 | 21 | 22 | |
| V3 | Stack 3 Ammonia Vaporizer 3 (7) | NH3 | <0.01 | 0.02 | 7 | 21 | 22 | |
| IG4 | Stack 4 Ammonia Injection Grid 4 (7) | NH3 | <0.01 | 0.02 | 7 | 21 | 22 | |
| V4 | Stack 4 Ammonia Vaporizer 4 (7) | NH3 | <0.01 | 0.02 | 7 | 21 | 22 | |

Footnotes:

- (1) Emission point identification either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.

(3) NO. - total oxides of nitrogen

- carbon monoxide CO

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

- sulfur dioxide SO.

PM

- total particulate matter, suspended in the atmosphere, including $PM_{_{10}}$ and $PM_{_{2.5}}$ - total particulate matter equal to or less than 10 microns in diameter, including $PM_{_{2.5}}$ PM_{10}

- particulate matter equal to or less than 2.5 microns in diameter PM.

NH. - ammonia

- ammonium hydroxide NH, OH

- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Hourly emissions shown are the only emissions that are higher than emissions during normal operations. Normal operations emission limits apply to pollutants not shown that are emitted during transient operation, CT maintenance, startup, and shutdown (MSS).
- (6) For CT MSS and transient operation CO emissions may exceed 2,100 lbs/hr no more than 50 hours per year for all turbines combined, but must never exceed 3,500 lbs/hr.
- (7) Emission rate is an estimate and is enforceable through compliance with the applicable special conditions and permit application representations.



Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To

Hays Energy LLC

Authorizing the Construction and Operation of

Hays Energy Facility

Located at San Marcos, Hays County, Texas

Latitude 29° 46′ 50″ Longitude -97° 59′ 22″

| Permits: 40040 and l | PSDTX923 | |
|----------------------|---------------|--------------------|
| Amendment Date: | April 6, 2016 | - 'Kal A trale |
| Expiration Date: | April 6, 2019 | |
| • | <u> </u> | For the Commission |

- 1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] ¹
- 2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
- 3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
- 4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
- 5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling

Revised (10/12)

- facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
- 6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
- 7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
- 8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] ¹
- 9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
- 10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
- 11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
- 12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
- 13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
- 14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. ¹

¹ Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Revised (10/12) 2

Special Conditions

Permit Numbers 40040 and PSDTX923

Emission Standards and Operating Specifications

- 1. This permit covers only those sources of emissions listed in the attached tables entitled "Emissions Sources Maximum Allowable Emission Rates" (MAERT), "Attachment A", and "Attachment B" and those sources are limited to the emission limits and other conditions specified in the attached MAERT. This permit authorizes planned maintenance, startup, and shutdown (MSS) activities which comply with the emission limits in the MAERT. (5/13)
- 2. Four ABB (Alstom) Model GT24 Gas Combustion Turbines (CTs) with steam injection in combined cycle with heat recovery steam generators (HRSG) and steam turbines are authorized by this permit. Each combined cycle unit has a single electric generator rated at a nominal electric output capability of 275 megawatts. Each CT is directly connected to the generator shaft and the steam turbine is indirectly connected to the generator shaft using a clutch and transmission to match CT speed. The CTs may employ evaporative cooling or steam injection for power enhancement. The HRSGs do not have duct burners. (5/13)
 - A. The CTs are authorized for two modes of non-transient operation:
 - (1) Normal Operation from 100 percent (%) to 45% of full load. Normal operation may extend to lower loads if nitrogen oxides (NO_x) emissions comply with the concentration limits of Special Condition No. 3.A. (5/13)
 - (2) Hold Point 2 from 8% to 12% of full load.
 - B. The CTs are authorized for transient operation as follows:
 - (1) Start-up and shutdown, as defined in Special Condition No. 16. (5/13).
 - (2) In transition,
 - (a) increasing load from Hold Point 2 to Normal Operation; and
 - (b) decreasing load from Normal Operation to Hold Point 2. (7/04)
 - C. The CTs are authorized to operate for planned maintenance as described in Attachment B, subject to the conditions of this permit and the representations in the amendment application dated January 3, 2011, as subsequently updated. (5/13)

- D. Steam injection must not exceed 2,000 hours per year per CT. (6/01)
- 3. A. The concentration of emissions from each CT while in the normal operating range as defined in Special Condition No. 2.A.(1) shall not exceed the following limits expressed in parts per million by volume (ppmv), dry, at 15% oxygen (O₂), on a block one-hour average. **(5/13)**

Concentration Limits During Normal CT Operation

| Pollutant | | Fuel | |
|---|----------------------|-------------|----------|
| | | Natural Gas | Fuel Oil |
| NO_x | | 5 | 9 |
| Carbon monoxide (CO) ¹ | | 5 | 10 |
| | with SI ² | 29 | |
| Volatile organic compounds (VOC) ^{1,3} | | 0.4 | 2.0 |
| | with EC or SI4 | 3.0 | |
| Ammonia (NH ₃) | | 10 | 10 |

¹Limits apply during full load only. At less than full load, comply with the MAERT limits.

- B. The limits in A. of this Special Condition do not apply to a CT operating:
 - (1) at Hold Point 2, as defined in Special Condition No. 2.A.(2);
 - (2) in transient operation, as described in Special Condition No. 2.B.; or
 - (3) in maintenance modes, as described in Attachment B.
- 4. Fuel for the CTs:
 - A. Is limited to:
 - (1) Pipeline-quality natural gas containing no more than 0.8 grain total sulfur per 100 dry standard cubic feet.
 - (2) No. 2 fuel oil, fired only during emergencies, including, but not limited to, natural gas interruptions, and further limited to no more than:
 - (a) 0.05% total sulfur by weight; and
 - (b) 720 hours of firing annually for each CT.

²Higher limit applies while using steam injection (SI).

³Defined as total hydrocarbons minus methane and ethane, calculated as propane.

⁴Higher limit applies while using evaporative cooling (EC) or SI.

- (3) The use of any other fuels is prohibited.
- B. Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel fired in the CTs or shall allow air pollution control agency representatives to obtain a sample for analysis.
- 5. A. For normal operations, the NH_3 handled at the plant shall be in an aqueous solution stored in four tanks, each holding 14,000 gallons. **(6/01)**
 - B. As an emergency supply to the selective catalytic reduction (SCR) systems, anhydrous NH₃ may be stored in small cylinders (typical weight 150 pounds).
- 6. During normal operation (natural gas-fueled), the opacity of emissions from the CTs shall not exceed 5% averaged over a six-minute period, except during periods of MSS. During MSS activities, the opacity shall not exceed 15% averaged over a six-minute period. Observations shall be performed quarterly while the CTs are in operation. Observations shall be made at least 15 feet and no more than 0.25 mile from the emission point. If visible emissions are observed from the stack, the opacity shall be determined by the U.S. Environmental Protection Agency (EPA) Reference Method No. 9. If the opacity exceeds 5% during normal operation, or 15% during MSS activity, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation. (5/13)
- 7. Audio, visual, and olfactory (AVO) checks for NH_3 shall be made twice daily within the operating area. No later than one hour following detection of a leak, plant personnel shall take one or more of the following actions as appropriate: (4/16)
 - A. Locate and isolate the leak.
 - B. Commence repair or replacement of the leaking component as appropriate.
 - C. Use a leak collection/containment system to control the leak until repair or replacement can be made.

Federal Applicability

8. A. The four CTs shall comply with applicable requirements of the EPA regulations on Standards of Performance for New Stationary Sources (NSPS), Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), including: (4/09)

- (1) Subpart A General Conditions; and
- (2) Subpart GG Stationary Gas Turbines.
- B. The four emergency diesel generator engines and one diesel fire water pump engine shall comply with applicable requirements of maximum achievable control technology (MACT) standards in 40 CFR Part 63, Subpart ZZZZ for existing area sources of hazardous air pollutants.
- C. If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit shall govern and be the standard by which compliance shall be demonstrated.

Initial Determination of Compliance

- 9. Sampling ports and platforms shall be incorporated into the design of all exhaust stacks according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Austin Regional Director. (4/09)
- 10. The holder of this permit shall perform stack sampling and other testing as required to establish the actual quantities of air contaminants being emitted into the atmosphere from each CT stack, identified as Emission Point Nos. (EPNs) STACK 1, STACK 2, STACK 3, and STACK 4, for each of the fuel firing modes: natural gas and No. 2 fuel oil. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the appropriate EPA Reference Method, to include condensible particulate for the concentration of particulate matter less than 10 microns in diameter (PM₁₀); Reference Method 8 or Reference Methods 6 or 6c for sulfur dioxide (SO₂); Reference Method 9 for opacity; Reference Method 10 for the concentration of CO; Reference Method 25A, modified to exclude methane and ethane, for the concentration of VOC (to measure total carbon as propane); Reference Method 20 for the concentrations of NO_x and O₂; and the EPA Conditional Test Method (CTM) 27 for NH₃; or by other equivalent methods approved by the TCEQ Austin Regional Director. (4/09)

Fuel sampling using the methods and procedures of 40 CFR § 60.334(h)(3)(i) may be conducted in lieu of stack sampling for SO₂. If fuel sampling is used, compliance with 40 CFR Part 60, Subpart GG, SO₂ limits shall be based on 100% conversion of the sulfur in the fuel to SO₂. Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling. The

TCEQ Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling. (4/09)

The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his/her expense.

A. The TCEQ Austin Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Procedure used to determine CT loads during and after the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. A written proposed description of any deviation from sampling procedures specified in permit conditions or the TCEQ or the EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Austin Regional Director shall approve or disapprove of any deviation from specified sampling procedures. Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for New Source Performance Standards testing which must have the EPA approval shall be submitted to the TCEQ Austin Regional Office. (4/09)

B. Air emissions from each CT shall be tested while firing at full load for the ambient conditions and equipment capability at the time of testing, in each of the fuel firing modes: natural gas and fuel oil. The SCR systems will be in operation at the required capability at all times during testing. Air contaminants to be sampled and analyzed while at full load include (but are not limited to) NO_x, O₂, CO, NH₃, VOC, SO₂, PM₁₀, and opacity. Fuel sampling using the methods and procedures of 40 CFR § 60.335(b)(10) may be conducted in lieu of stack sampling for SO₂. **(5/13)**

If fuel oil capability is not available, then the CTs shall be retested within 60 days after fuel oil capability is available. (5/13)

- C. The VOC emissions shall be sampled and analyzed at or near 50% of base load for both the natural gas and fuel oil firing modes. The SCR and continuous emission monitoring systems (CEMS) will be in operation at the required capability during testing with the steam turbine clutch engaged to the generator shaft (normal operation) and with the measured load at the generator terminals including the capability added by operation of the steam turbine. Each tested load shall be identified in the sampling report. The CEMS-measured NO_x and CO stack concentrations and mass emission rates shall be specified in the test report for each tested load. (7/04)
- D. Sampling of each CT shall occur within 60 days after achieving the maximum fuel firing rate at which the CT will be operated but no later than 180 days after initial start-up of each unit. Requests for an extension of this schedule shall be made in writing to and approved by the Director of the TCEQ Austin Regional Office. Additional sampling shall occur as may be required by the TCEQ or the EPA. (7/00)
- E. Within 60 days after the completion of the testing and sampling required herein, copies of the sampling report shall be distributed as follows: (4/09)
 - (1) One copy to the TCEQ Austin Regional Office.
 - (2) One copy to the EPA Region 6 Office, Dallas.
- F. It is noted that initial determination of compliance stack tests were completed on the following dates: **(5/13)**
 - (1) Unit 1 January 28, 2002
 - (2) Unit 2 August 16, 2001
 - (3) Unit 3 January 16, 2002
 - (4) Unit 4 May 21, 2002

Continuous Determination of Compliance

- 11. The holder of this permit shall install, calibrate, and maintain a CEMS to measure and record the in-stack concentration of NO_x , CO and diluent from each CT stack. If a NO_x CEMS is used in conjunction with Special Condition No. 14.B, this condition shall apply to it also. (5/13)
 - A. The NO_x and diluent CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 75, Appendices A and B. The

- requirements of 40 CFR Part 75 Appendices A and B are deemed an acceptable alternative to the performance specifications and quality assurance requirements of 40 CFR Part 60. **(5/13)**
- В. The CO CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 60, Performance Specification 4. The CEMS shall meet the applicable quality assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1, except that cylinder gas audits (CGA) conducted in four successive operating quarters may be used in lieu of the annual Relative Accuracy Test Audit. Quarterly CGAs shall be conducted at least 60 days apart. A CGA is not required in any non-operating quarter, defined as a quarter during which the CT operates less than 168 hours. Relative accuracy exceedances (as specified in 40 CFR Part 60, Appendix F), CGA exceedances of ±15% accuracy, and any CO CEMS downtime shall be reported to the TCEQ Austin Regional Director, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the TCEQ Austin Regional Director. (5/13)
- C. The CEMS shall be zeroed and spanned daily, and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in the applicable Performance Specification. (5/13)
- D. For full operating hours, the monitoring data must be reduced to hourly average values at least once every day, using a minimum of four equally-spaced data points from each block one-hour period except for hours in which calibration checks, zero and span adjustments, system breakdowns, or repairs occur. For those hours, two valid data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour) will be sufficient to quality assure the hour. The individual average concentrations must be converted to units of the permit allowable emission rate in pounds per hour (lb/hr) at least once every day. Pound per hour data from each CT stack must be summed monthly to tons per year and used to determine compliance with the annual emission limits of this permit. (5/13)
- E. During NO_x or CO analyzer over-scale events, a concentration value of twice the analyzer range will be substituted for each minute the analyzer is over-scaled. A valid hourly value will be the arithmetic average of all measured and substituted minutes in each clock hour. (5/13)
- F. During fuel gas flow meter failure events, fuel flow rate values will be substituted for each hour the flow meter is out of service. The values will be

- derived from a fuel flow-to-load correlation curve for that unit from a representative quarter. (5/13)
- G. All monitoring data and quality-assurance data shall be maintained by the source for a period of five years and shall be made available to the TCEQ Executive Director or his designated representative upon request. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit. (5/13)
- H. The TCEQ Austin Regional Office shall be notified at least 30 days prior to any required RATA in order to provide them the opportunity to observe the testing.
- I. The holder of this permit may request authorization from the Office of Air, Air Permits Division of the TCEQ to install a predictive emissions monitoring system (PEMS) in lieu of a CEMS and to include conditions for PEMS certification and operation in this permit. The applicant should include, at minimum, in the PEMS authorization request: a detailed description of the PEMS (including the hardware and software to be used); a description of how the PEMS model will be or was developed, accounting for the operating load range of the CTs; a complete listing of the input parameters used in developing the PEMS model; and, if available, a listing of the final input parameters to be used by the PEMS in predicting emissions.
- 12. If any emission monitor fails to meet specified performance, it shall be repaired or replaced as soon as reasonably possible, but no later than seven days after it was first detected by any employee at the facility unless written permission is obtained from the TCEQ Austin Regional Office which allows for a longer repair or replacement time. The holder of this permit shall develop an operation and maintenance program (including stocking necessary spare parts) to ensure that the continuous monitors are available as required.
- 13. The holder of this permit shall additionally install, calibrate, maintain, and operate continuous monitoring systems to monitor and record the average hourly natural gas consumption of the CTs. The systems shall be accurate to $\pm 2.0\%$ of the unit's maximum flow. (5/13)
- 14. Following the initial determination of compliance testing for NH₃ emission rates and stack concentrations (pursuant to Special Condition No. 10) or within 90 days of initial start-up, whichever occurs first, the NH₃ concentration in each CT Stack shall be tested or calculated according to the method and frequency listed below.

- A. The NH₃ slip may be measured using a sorbent or stain tube device specific for NH₃ measurement in the 5 to 10 ppmv ranges. The frequency of sorbent or stain tube testing shall be daily for the first 15 days of operation, after which, the frequency may be reduced to biweekly (every two weeks) testing if operating procedures have been developed to prevent excess amounts of NH₃ from being introduced in the SCR unit and when operation of the SCR unit has been proven successful with regard to controlling NH₃ slip. Daily sorbent or stain tube testing shall continue or resume after the initial 15-day period if NH₃ is measured at or above 10 ppmv.
- B. As an approved alternative to sorbent or stain tube testing, the permit holder may install and operate a second NO_x CEMS probe located between the CTs and the SCR catalyst, upstream of the stack NO_x CEMS, which may be used in association with the SCR Catalyst efficiency and NH_3 injection rate to estimate NH_3 slip. This condition shall not be construed to set a minimum NO_x reduction efficiency on the SCR Unit.
- C. If the measured or calculated NH₃ slip concentration exceeds 8 ppmv at any time, the permit holder shall begin NH₃ testing by the EPA CTM 27, or approved equivalent, on a quarterly basis, in addition to biweekly sorbent or stain tube testing. The quarterly testing shall continue until such time as the SCR Unit Catalyst is replaced; or if the quarterly testing indicates NH₃ slip is 5 ppmv or less, the CTM 27 tests (or approved equivalent) may be suspended until sorbent or stain tube testing, or as calculated per paragraph B, again indicates 8 ppmv NH₃ slip or greater.

These results shall be recorded and used to determine compliance with Special Condition No. 3.A. Any other method used for measuring NH_3 slip shall require prior approval from the TCEQ Austin Regional Director. (4/09)

Maintenance, Startup, and Shutdown (5/13)

- 15. This permit authorizes emissions from the planned startup and shutdown of the CTs and the maintenance activities listed in Attachment A and Attachment B of this permit. Attachment A identifies the inherently low-emitting (ILE) planned maintenance activities that this permit authorizes to be performed. Attachment B identifies the non-ILE planned maintenance activities that this permit authorizes to be performed.
- 16. The holder of this permit shall operate the CTs and associated ancillary equipment in accordance with good air pollution control practice to minimize emissions during planned MSS activities.

- 17. Emissions during planned startup and shutdown activities for the CTs will be minimized by limiting the duration of operation in planned startup and shutdown mode as follows:
 - A. A planned startup for each CT shall not exceed 240 minutes. A planned startup is defined as the period that begins when natural gas is introduced into the CT and ends when the CT reaches 45% of full load.
 - B. A planned shutdown for each CT shall not exceed 120 minutes. A planned shutdown is defined as the period that begins when the CT load decreases below 45% of full load or the load decreases below Hold Point 2, and ends when combustion is terminated in the CT, or when the CT recovers from an auto unload or runback.
- 18. Compliance with the emission limits for planned MSS activities identified in the MAERT attached to this permit shall be demonstrated as follows.
 - A. For ILE planned maintenance activities identified in Attachment A of this permit:
 - (1) The total emissions from all activities shall be considered to be no more than the estimated potential to emit for those activities that are represented in the permit application.
 - (2) The permit holder shall annually confirm the continued validity of the estimated potential-to-emit represented in the permit application for all activities.
 - B. For NO_x and CO emissions during planned CT MSS, the permit holder shall use the NO_x and CO CEMS in accordance with Special Condition No. 11 of this permit to demonstrate compliance.
 - C. For pollutants from CT MSS not measured using CEMS, the permit holder shall do the following.
 - (1) Determine the emissions of each pollutant listed on the MAERT of this permit from all occurrences of planned MSS activity by calculating the pollutant's hourly and monthly emissions using data related to the planned MSS activity identified in turbine operating records, work orders, or equivalent records and the emissions of the pollutant during the planned MSS activity, either

- (a) as represented in the planned MSS permit application; or
- (b) as determined with an appropriate method, including but not limited to any of the following methods, provided that the permit holder maintains appropriate records supporting such determination:
 - i. use of emission factor(s), facility-specific parameter(s), and/or engineering knowledge of the facility's operations;
 - ii. use of emissions data measured (by a CEMS or during emissions testing) during the same type of planned MSS activity occurring at or on a similar facility, and correlation of that data with the activity's or facility's relevant operating parameters;
 - iii. use of emissions testing data collected during a planned MSS activity occurring at or on the facility, and correlation of that data with the facility's or activity's relevant operating parameters, such as electric load, temperature, fuel input, or fuel sulfur content; or
 - iv. use of parametric monitoring system data applicable to the facility.
- (2) For each calendar month, determine the emissions of each pollutant emitted that result from such planned MSS activities.
- (3) Once monthly emissions have been determined for the 12 months following the issuance of the MSS permit amendment, begin comparing the rolling 12-month emissions for each pollutant to the applicable annual turbine emissions limit in the MAERT.
- 19. With the exception of the emission limits in the MAERT attached to this permit, the permit conditions relating to planned MSS activities do not become effective until 180 days after issuance of the permit amendment that added such conditions.

Recordkeeping

20. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made available at the request of personnel from the TCEQ, the EPA, or any air pollution control agency with jurisdiction.

- A. A copy of this permit.
- B. Permit application dated November 25, 1998, and subsequent representations submitted to the TCEQ.
- C. A complete copy of the testing reports and records of the initial performance testing completed pursuant to Special Condition No. 10 to demonstrate initial compliance.
- D. Stack sampling results or other air emissions testing (other than CEMS data) that may be conducted on units authorized under this permit after the date of issuance of this permit.
- E. The SCR catalyst unit maintenance records specifying frequency of NH₃ monitoring and dates of catalyst replacement.
- 21. The following information shall be maintained by the holder of this permit in a form suitable for inspection for a period of five years after collection and shall be made immediately available upon request to representatives of the TCEQ, the EPA, or any local air pollution control program having jurisdiction:
 - A. The CEMS data of NO_x, CO, and O₂ emissions from each CT stack to demonstrate compliance with the concentration limits in Special Condition No. 3 and mass emission rates listed in the MAERT. (5/13)
 - B. Raw data files of all CEMS data including calibration checks and adjustments and maintenance performed on these systems in a permanent form suitable for inspection.
 - C. Hours of steam injection to enhance the power output of each CT pursuant to Special Condition No. 2.
 - D. Records of hours of operation, average daily quantity of natural gas and No. 2 fuel oil fired, the number of hours fuel oil is fired each month, and the rolling 12-month total hours of oil fired for each CT pursuant to Special Condition No. 4. (4/09)
 - E. Records of the NH₃ measurements made pursuant to Special Condition No. 14. **(4/09)**
 - F. Records of the opacity measurements made pursuant to Special Condition No. 6. **(4/09)**

- G. Records of CT tuning/optimization to demonstrate compliance with the CO emission limit in the MAERT. (5/13)
- H. Records of CT startups and shutdowns to demonstrate compliance with Special Condition No. 17. (5/13)
- I. Records of MSS activities and their emissions to demonstrate compliance with Special Condition No. 18. (5/13)
- J. Records of twice daily AVO inspections of the ammonia injector, vaporizer, and storage system. **(4/16)**

Reporting

- 22. The holder of this permit shall submit, to the TCEQ Austin Regional Office and the Air Enforcement Branch of the EPA in Dallas, quarterly reports as described in 40 CFR § 60.7. Such reports are required for each emission unit which is required to be continuously monitored pursuant to this permit.
 - A. The following reporting requirements apply specifically to 40 CFR 60 Subpart GG: **(5/13)**
 - (1) At all times, including periods of startup, shutdown, and malfunction (SSM), 40 CFR § 60.11(d) requires affected units to be operated in a manner consistent with good air pollution control practice for minimizing emissions. Excess emissions which occur during SSM are to be reported to determine whether a facility's operation and maintenance procedures are consistent with good air pollution control practice for minimizing emissions. [Federal Register Vol. 71, July 6, 2006, p. 38488]
 - (2) According to 40 CFR § 60.8(c), "Operations during periods of SSM shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of SSM be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard." Because the applicable standard, Subpart GG, does not specify limits during SSM, emission limits are not applicable during SSM.
 - (3) "SSM" is U.S. EPA terminology not used in the TCEQ's MSS rules in Title 30 Texas Administrative Code (30 TAC) Chapter 101. The references to

this terminology in (1) and (2) above are used to identify the reporting requirements under NSPS Subpart GG.

- B. In addition to the information specified in 40 CFR § 60.7(c), each report shall contain:
 - (1) the hours of operation of the equipment authorized by this permit;(4/09)
 - (2) a report summary of the periods of non-complying emissions and CEMS downtimes by cause; and (4/09)
 - (3) the number of hours in which data substitution occurred due to analyzer over-scaling or fuel flow meter failure. Data substitution for these reasons does not constitute monitor downtime for reporting required by 40 CFR § 60.7(c). (5/13)
- 23. If the average NO_x or CO stack outlet concentration exceeds the concentration limit of Special Condition No. 3 or the short term mass emission rate exceeds the applicable limitation in the MAERT for more than: **(08/14)**
 - A. one hour, the holder of this permit shall investigate and determine the reason for the exceedance and, if needed, make necessary repairs and/or adjustments as soon as possible; and
 - B. 24 consecutive hours, the permit holder shall notify, within 48 hours, the TCEQ Austin Regional Office either verbally or with a written report detailing the cause of the increase in emissions and all efforts being made to correct the problem. (5/13)

Additional Permit Authorizations at Site

24. The following operations are authorized by permits-by-rule under 30 TAC: (5/13)

Operations Authorized by Permit-by-Rule (PBR)

| Operations Authorized by Permit-by-Rule (PBR) | | | |
|--|---------------------|--------------------------|--|
| Sources | PBR | Registration No./Date | |
| Two dew point heaters and a zero discharge boiler | 30 TAC § 106.183 | None | |
| Soldering, brazing and welding activities for maintenance and repairs | 30 TAC § 106.227 | None | |
| Maintenance activities, including purging of natural gas from pipelines and CTs and abrasive blasting of immovable objects | 30 TAC § 106.263 | None | |
| Hand-held and manually operated machines | 30 TAC § 106.265 | None | |
| Two hot waste coolers, two air-cooled condensers, two air-cooled cooling water units, two wetted cooling towers | 30 TAC § 106.371 | None | |
| Storage of pressurized gas cylinders containing industrial gases | 30 TAC § 106.372 | None | |
| Refrigerants and the use of refrigeration systems | 30 TAC § 106.373 | None | |
| Enclosed or glovebox abrasive blasting | 30 TAC § 106.452(1) | None | |
| Non-enclosed blasting of movable objects | 30 TAC § 106.452(2) | Required | |
| Remote reservoir degreasing unit | 30 TAC § 106.454 | None | |
| Tanks to store diesel, lube oil, sulfuric acid and mineral oil | 30 TAC § 106.472 | None | |
| Loading, unloading and storage of gasoline | 30 TAC § 106.473 | None | |
| Pressure vessels | 30 TAC § 106.476 | None | |
| Four 440-hp emergency generators and one 240-hp fire water pump | 30 TAC § 106.511 | None | |
| Water treatment system and wastewater treatment by separation | 30 TAC § 106.532 | None | |

Date: April 6, 2016

 ${\bf Attachment} \ {\bf A}$ ${\bf ILE} \ {\bf Planned} \ {\bf Maintenance} \ {\bf Activities} \ {\bf at} \ {\bf the} \ {\bf Hays} \ {\bf Energy} \ {\bf Facility}$

| | | Emissions | | | | | |
|---|------------|-----------|-----------------|----|----|-----------------|--------|
| Planned Maintenance Activity | EPN | VOC | NO _X | CO | PM | SO ₂ | NH_3 |
| Process-related building and turbine air-intake filter maintenance ¹ | MSSFUG | | | | X | | |
| Catalyst handling and maintenance ² | MSSFUG | | | | X | | |
| Maintenance of reservoirs or storage tanks storing lube oil, fuel oil, or other material with vapor pressure <0.5 psia ³ | MSSFUG | X | | | | | |
| Maintenance of storage vessels storing gasoline or other material with a vapor pressure >0.5 psia that does not require clearing to allow for entry of personnel ³ | MSSFUG | x | | | | | |
| Ammonia storage tank/vessel maintenance, requiring clearing for personnel entry ³ | MSSFUG | | | | | | X |
| Sludge Management ⁴ | MSSFUG | X | | | | | |
| Inspection, repair, replacement, adjusting, testing, and calibration of analytical equipment and process instruments, including sight glasses, meters, gauges, CEMS, and PEMS. | MSSFUG | x | | | | | |
| CEMS Calibration | MSSFUG | | X | X | | | |
| Turbine washing - unit online | STACKs 1-4 | | | | X | | |
| Small equipment and fugitive component repair/replacement in VOC service ⁵ | MSSFUG | X | | | | | |
| Small equipment and fugitive component repair/replacement in NH ₃ service ⁶ | MSSFUG | | | | | | х |
| Gaseous fuel venting | MSSFUG | X | | | | | |
| Vacuum truck solids loading | MSSFUG | | | | X | | |

Attachment A, continued

ILE Table Notes:

- 1. Includes, but is not limited to, process-related building air filters and CT air intake filters.
- 2. Includes, but is not limited to, replacement, cleaning, activation, and deactivation of SCR and oxidation catalysts.
- 3. Includes, but is not limited to, related emptying, degassing, and cleaning.
- 4. Includes, but is not limited to, management by vacuum truck/dewatering of materials in open pits and ponds, sumps, tanks and other closed or open vessels. Materials include water and sludge mixtures containing miscellaneous VOCs such as fuel oil, lube oil, and other waste oils.
- 5. Includes, but is not limited to:
 - (i) repair/replacement of pumps, compressors, valves, pipes, flanges, transport lines, filters and screens in fuel oil, diesel oil, lube oil, and gasoline service; and
 - (ii) vehicle and mobile equipment maintenance that may involve small VOC emissions, such as oil changes, transmission service, and hydraulic system service.
- 6. Includes, but is not limited to:
 - (i) repair/replacement of pumps, compressors, valves, pipes, flanges, transport lines, filters and screens in NH₃ service; and
 - (ii) off-line NO_x control device maintenance, including maintenance of the aqueous NH₃ systems associated with SCR systems.

Date: May 22, 2013

Attachment B

Non-ILE Planned Maintenance Activities at the Hays Energy Facility

| Planned Maintenance | | | Eı | missio | ns | |
|----------------------------|---------|-----|-----|--------|------------------|-----------------|
| Activity | EPNs | VOC | NOX | CO | PM ₁₀ | SO ₂ |
| CT Maintenance and Tuning¹ | STACK 1 | Х | ** | V | X | X |
| | STACK 2 | | | | | |
| | STACK 3 | | X | X | | |
| | STACK 4 | | | | | |

¹Includes, but is not limited to, combustion tuning, temperature mapping following inspection, generator balancing, and gas turbine overspeed trip testing.

Date: <u>April 6, 2016</u>

Permit Numbers 40040 and PSDTX923

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

| Emission Point | Source Name (2) | Air Contaminant | Emission Rates | |
|-----------------------|--|--------------------|----------------|---------|
| No. (1) | | Name (3) | lbs/hour | TPY (4) |
| | Combustion Turbine Model ABB GT24 | NO _x | 34 | |
| | | CO | 254 | |
| | | VOC | 17.6 | |
| | Natural Gas Firing | SO_2 | 4.2 | |
| | Normal, Hold Point 2 | PM_{10} | 20 | |
| | Hold Point 2 | NH_3 | 25.2 | |
| | | NO _x | 34 | |
| | ABB GT24 | CO | 105 | |
| | Natural Gas Firing | VOC | 10 | |
| | | SO_2 | 5.2 | |
| | Steam Injection Mode | PM ₁₀ | 24.3 | |
| STACK1 | | NH_3 | 24.7 | |
| | | NO _x | 77 | |
| | | СО | 310 | |
| | ABB GT24 | VOC | 18 | |
| | Fuel Oil Firing | SO_2 | 111 | |
| | | PM_{10} | 112 | |
| | | NH_3 | 31.1 | |
| | ABB GT24 | NO _x | 990 | |
| | Startup and Shutdown Operation , and | CO | 2,100 | |
| | Transient Operation (5)(6) | VOC | 132 | |
| | ABB GT24 Maintenance/CT Tuning (5)(6) | СО | 3,500 | |

| Emission Point No. (1) | Source Name (2) | Air Contaminant | Emission Rates | | |
|---------------------------|--|--------------------|-----------------------|---------|--|
| | | Name (3) | lbs/hour | TPY (4) | |
| | | NO _x | 34 | | |
| | Combustion Turbine Model ABB GT24 | СО | 254 | | |
| | · | VOC | 17.6 | | |
| | Natural Gas Firing | SO_2 | 4.2 | | |
| | Normal, Hold Point 2 | PM ₁₀ | 20 | | |
| | Hold Follit 2 | NH ₃ | 25.2 | | |
| | | NO _x | 34 | | |
| | ABB GT24 | СО | 105 | | |
| | · | VOC | 10 | | |
| | Natural Gas Firing | SO_2 | 5.2 | | |
| | Steam Injection Mode | PM_{10} | 24.3 | | |
| STACK2 | | NH_3 | 24.7 | | |
| | | NO _x | 77 | | |
| | | СО | 310 | | |
| | ABB GT24 | VOC | 18 | | |
| | Fuel Oil Firing | SO_2 | 111 | | |
| | | PM_{10} | 112 | | |
| | | NH_3 | 31.1 | | |
| | ABB GT24 | NO _x | 990 | | |
| | Startup and Shutdown Operation , and | СО | 2,100 | | |
| | Transient Operation (5)(6) | VOC | 132 | | |
| | ABB GT24 Maintenance/CT Tuning (5)(6) | СО | 3,500 | | |
| | | NO _x | 34 | | |
| | Combustion Turbine Model ABB GT24 Natural Gas Firing | СО | 254 | | |
| CTD A CLTZ | | VOC | 17.6 | | |
| STACK3 | | SO_2 | 4.2 | | |
| | Normal, | PM ₁₀ | 20 | | |
| | Hold Point 2 | NH_3 | 25.2 | | |

| Emission Point No. (1) | Source Name (2) | Air Contaminant | Emission Rates | | |
|---------------------------|--|--------------------|-----------------------|---------|--|
| | | Name (3) | lbs/hour | TPY (4) | |
| | | NO _x | 34 | | |
| | ABB GT24 | СО | 105 | | |
| | | VOC | 10 | | |
| | Natural Gas Firing | SO_2 | 5.2 | | |
| | Steam Injection Mode | PM ₁₀ | 24.3 | | |
| | | NH_3 | 24.7 | | |
| | | NO _x | 77 | | |
| | | CO | 310 | | |
| STACK3 | ABB GT24 | VOC | 18 | | |
| | Fuel Oil Firing | SO_2 | 111 | | |
| | | PM_{10} | 112 | | |
| | | NH_3 | 31.1 | | |
| | ABB GT24 | NO _x | 990 | | |
| | Startup and Shutdown Operation , and | СО | 2,100 | | |
| | Transient Operation (5)(6) | VOC | 132 | | |
| | ABB GT24 Maintenance/CT Tuning (5)(6) | СО | 3,500 | | |
| | NO _x | 34 | | | |
| | Combustion Turbine Model ABB GT24 | СО | 254 | | |
| | | VOC | 17.6 | | |
| | Natural Gas Firing | SO_2 | 4.2 | | |
| | Normal, | PM_{10} | 20 | | |
| am . a | Hold Point 2 | NH_3 | 25.2 | | |
| STACK4 | | NO _x | 34 | | |
| | ABB GT24 | СО | 105 | | |
| | | VOC | 10 | | |
| | Natural Gas Firing | SO_2 | 5.2 | | |
| | Steam Injection Mode | PM ₁₀ | 24.3 | | |
| | | NH_3 | 24.7 | | |

| Emission Point No. (1) | Source Name (2) | Air Contaminant | Emission Rates | | |
|---------------------------|--|--------------------|-----------------------|---------|--|
| | | Name (3) | lbs/hour | TPY (4) | |
| | | NO _x | 77 | | |
| | | СО | 310 | | |
| | ABB GT24 | VOC | 18 | | |
| | Fuel Oil Firing | SO_2 | 111 | | |
| | | PM ₁₀ | 112 | | |
| STACK4 | | NH_3 | 31.1 | | |
| | ABB GT24 | NO _x | 990 | | |
| | Startup and Shutdown Operation , and | CO | 2,100 | | |
| | Transient Operation (5)(6) | VOC | 132 | | |
| | ABB GT24 Maintenance/CT Tuning (5)(6) | СО | 3,500 | | |
| | | NO _x | | 611.2 | |
| | | СО | | 865.9 | |
| STACK1 STACK2 | ABB GT24 Annual Emissions | VOC | | 132.4 | |
| STACK3 | Includes all four CTs combined and all modes of operation. | SO_2 | | 213.2 | |
| STACK4 | | PM_{10} | | 478.4 | |
| | | NH_3 | | 418.8 | |
| TIVO | | VOC | 0.29 | 1.27 | |
| FUG | Site Fugitives (7) | NH ₄ OH | 0.15 | 0.65 | |
| Vent No. 1 | Lube Oil Reservoir Vapor Extractor | VOC | 0.003 | 0.01 | |
| Vent No. 2 | Lube Oil Reservoir Vapor Extractor | VOC | 0.003 | 0.01 | |
| Vent No. 3 | Lube Oil Reservoir Vapor Extractor | VOC | 0.003 | 0.01 | |
| Vent No. 4 | Lube Oil Reservoir Vapor Extractor | VOC | 0.003 | 0.01 | |
| | | NO _x | <0.01 | <0.01 | |
| MSS FUG | | СО | 0.04 | 0.01 | |
| | | VOC | 21 | 1.1 | |
| | Inherently Low-Emitting Maintenance Activities (7) | PM | 4.5 | 0.1 | |
| | wantenance Activities (7) | PM_{10} | 4.5 | 0.1 | |
| | | $PM_{2.5}$ | 4.5 | 0.1 | |
| | | NH_3 | 6.6 | 0.1 | |

| Emission Point | Source Name (2) Contaminant | | Emission Rates | |
|-----------------------|--------------------------------------|-----------------|----------------|------|
| No. (1) | | lbs/hour | TPY (4) | |
| IG1 | Stack 1 Ammonia Injection Grid 1 (7) | NH_3 | <0.01 | 0.02 |
| V1 | Stack 1 Ammonia Vaporizer 1 (7) | NH_3 | <0.01 | 0.02 |
| IG2 | Stack 2 Ammonia Injection Grid 2 (7) | NH_3 | <0.01 | 0.02 |
| V2 | Stack 2 Ammonia Vaporizer 2 (7) | NH_3 | <0.01 | 0.02 |
| IG3 | Stack 3 Ammonia Injection Grid 3 (7) | NH_3 | <0.01 | 0.02 |
| V ₃ | Stack 3 Ammonia Vaporizer 3 (7) | NH_3 | <0.01 | 0.02 |
| IG4 | Stack 4 Ammonia Injection Grid 4 (7) | NH_3 | <0.01 | 0.02 |
| V4 | Stack 4 Ammonia Vaporizer 4 (7) | NH_3 | <0.01 | 0.02 |

- (1) Emission point identification either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) NO_x total oxides of nitrogen
 - CO carbon monoxide
 - VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - SO₂ sulfur dioxide
 - PM total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5} PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}
 - PM_{2.5} particulate matter equal to or less than 2.5 microns in diameter
 - NH₃ ammonia
 - NH₄OH ammonium hydroxide
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Hourly emissions shown are the only emissions that are higher than emissions during normal operations. Normal operations emission limits apply to pollutants not shown that are emitted during transient operation, CT maintenance, startup, and shutdown (MSS).
- (6) For CT MSS and transient operation CO emissions may exceed 2,100 lbs/hr no more than 50 hours per year for all turbines combined, but must never exceed 3,500 lbs/hr.
- (7) Emission rate is an estimate and is enforceable through compliance with the applicable special conditions and permit application representations.

| ъ. | |
|-------|---------------|
| Date: | April 5, 2016 |